Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently amended) A ~~data product~~ map data processing apparatus, ~~that can be read into a computer or a map data processing apparatus,~~ ~~containing therein map data having map related information of a map, the map~~ ~~data~~ comprising:

a recording medium drive unit that receives a recording medium in which are recorded map data including a structure having ~~the~~ map-related information divided into units of a plurality of divisions into which ~~the~~ a map is divided~~;~~ and a structure having management information for the map-related information divided into units of the divisions;

~~the map related information obtained by the computer or the map data~~ ~~processing apparatus can be updated in units of the individual divisions by using~~ ~~the management information~~ an update data acquisition unit that obtains update data for the map-related information provided in units of the individual divisions; and

a processing unit that updates the map-related information recorded in the recording medium in units of the individual divisions by using the update

data obtained by the update data acquisition unit and the management

information, and executes processing of the map data based upon the map-

related information recorded in the recording medium, the update data obtained

by the update data acquisition unit and the management information, wherein:

a plurality of levels are defined, each in correspondence to one of a

plurality of different scaling factors at which the map is rendered;

a plurality of sets of the map-related information are provided in

correspondence to the plurality of levels; and

as the map-related information provided in units of the individual

divisions, at least one type of map-related information available at all levels and

another type of map-related information available at, at least, one level are

provided separately from each other; and

the processing unit executes processing of the map data by using the map-

related information in units of the individual divisions provided separately with

the one type of map-related information and the other type of map-related

information.

2.   (Currently amended) A ~~data product~~ map data processing

apparatus according to claim 1, wherein:

the map is divided into a plurality of first division units, the first division

units are each divided into a plurality of second division units, a number of the

second division units is equal among the individual first division units, and the

divisions into which the map is divided each corresponding to one of the second

division units; and

the management information contains a set of management information

related to the plurality of second division units, provided in correspondence to

each of the first division units.

3.   (Currently amended) A ~~data product~~ <u>map data processing</u>

<u>apparatus</u> according to claim 2, wherein:

the management information further contains management information

related to the plurality of first division units.

4.   (Currently amended) A ~~data product~~ <u>map data processing</u>

<u>apparatus</u> according to claim 2, wherein:

~~a plurality of levels are defined, each in correspondence to one of a~~

~~plurality of different scaling factors at which the map is rendered,~~

the map is divided into a plurality of first division units at each level, the

first division units are each divided into a plurality of second division units, the

number of second division units is equal among the individual first division
units, and the divisions into which the map is divided each corresponding to one
of the second division units; and

~~a plurality of sets of the map-related information are provided in~~
~~correspondence to the plurality of levels, and~~

the management information contains a set of management information
related to the plurality of first division units provided in correspondence to each
of levels, and also contains a set of management information related to the
plurality of second division units provided in correspondence to each of the first
division units.

Claims 5-6   (Canceled)

7.   (Currently amended) A ~~data product~~ map data processing
apparatus according to claim ~~1~~ 6, wherein:

the one type of map-related information is used to display the map at a
display device; and

the other type of map-related information contains information used in
route search.

8.   (Currently amended) A ~~data product~~ <u>map data processing</u>

<u>apparatus, comprising</u> ~~according to claim 1, wherein~~:

<u>a recording medium drive unit that receives a recording medium in which</u>

<u>are recorded map data including a structure having map-related information</u>

<u>divided into units of a plurality of divisions into which a map is divided, and a</u>

<u>structure having management information for the map-related information</u>

<u>divided into units of the divisions;</u>

<u>an update data acquisition unit that obtains update data for the map-</u>

<u>related information provided in units of the individual divisions; and</u>

<u>a processing unit that updates the map-related information recorded in</u>

<u>the recording medium in units of the individual divisions by using the update</u>

<u>data obtained by the update data acquisition unit and the management</u>

<u>information, and executes processing of the map data based upon the map-</u>

<u>related information recorded in the recording medium, the update data obtained</u>

<u>by the update data acquisition unit and the management information, wherein:</u>

<u>a plurality of levels are defined, each in correspondence to one of a</u>

<u>plurality of different scaling factors at which the map is rendered;</u>

<u>a plurality of sets of the map-related information are provided in</u>

<u>correspondence to the plurality of levels; and</u>

the map is divided into a plurality of divisions at each level, and each of the plurality of sets of map-related information, corresponding to a given level, is divided in units of the individual divisions into which the map is divided;

a connecting point at which the map-related information corresponding to one of two divisions is correlated to the map-related information corresponding to the other division is present at a geographically matching position within the two divisions, the two divisions respectively belonging to levels different from each other; and

sets of information related to the connecting point contain common two-dimensional coordinate values indicating the position of the connecting point within the map in the map-related information corresponding to the two divisions;

two-dimensional coordinate values of the connecting point at a level at which the map is rendered in greater detail are attached to two-dimensional coordinate values of the connecting point at a given level; and

the processing unit executes processing of the map data by using the two-dimensional coordinate values of the connecting point at a given level to which the two-dimensional coordinate values of the connecting point at a level at which the map is rendered in greater detail is attached.

9.   (Currently amended) A ~~data product~~ <u>map data processing</u> <u>apparatus</u> according to claim 8, wherein:

the two-dimensional coordinate values are values corresponding to latitudinal and longitudinal values.

10.   (Currently amended) A ~~data product~~ <u>map data processing</u> <u>apparatus</u> according to claim 8, wherein:

the information related to the connecting point contains a parameter other than the two-dimensional coordinate values of the connecting point in addition to the two-dimensional coordinate values.

11.   (Currently amended) A ~~data product~~ <u>map data processing</u> <u>apparatus</u> according to claim 10, wherein:

the parameter contains height information indicating a height of the connecting point.

12.   (Currently amended) A ~~data product~~ <u>map data processing</u> <u>apparatus</u> according to claim 10, wherein:

the parameter contains time information related to generation and update of the map-related information provided in units of the individual divisions.

Claim 13   (Canceled)

14.   (Currently amended) A ~~data product~~ map data processing apparatus, comprising ~~according to claim 1, wherein~~:

a recording medium drive unit that receives a recording medium in which are recorded map data including a structure having map-related information divided into units of a plurality of divisions into which a map is divided, and a structure having management information for the map-related information divided into units of the divisions;

an update data acquisition unit that obtains update data for the map-related information provided in units of the individual divisions; and

a processing unit that updates the map-related information recorded in the recording medium in units of the individual divisions by using the update data obtained by the update data acquisition unit and the management information, and executes processing of the map data based upon the map-related information recorded in the recording medium, the update data obtained by the update data acquisition unit and the management information, wherein:

the map-related information provided in units of individual divisions is separated into different types of map-related information to be individually managed; ~~and~~

map-related information having the highest priority among the different types of map-related information is managed by setting a predetermined upper limit to the size thereof; and

the processing unit executes processing of the map data by using the map-related information provided in units of individual divisions where the map-related information having the highest priority among the different types of map-related information is managed by setting the predetermined upper limit to the size thereof.

15. (Currently amended) A ~~data product~~ map data processing apparatus according to claim 14, wherein:

if the size of the map-related information having the highest priority exceeds the predetermined upper limit after update, at least map-related information corresponding to an excess beyond the predetermined upper limit to the size, which results from the update, is managed as map-related information with lower priority relative to the highest priority.

16.   (Currently amended) A ~~data product~~ map data processing apparatus according to claim 14, wherein:

the map-related information with the highest priority includes at least information used to display the map at a display device.

17.   (Currently amended) A ~~data product~~ map data processing apparatus according to claim 15, wherein:

the map-related information with the highest priority includes at least information used to display the map at a display device; and

the map-related information with the lower priority relative to the highest priority includes information that enables display of a more detailed map at the display device, compared to the map displayed by using the map-related information with the highest priority.

Claims 18-19   (Canceled)

20.   (Currently amended) A map data processing apparatus according to claim ~~19~~ 1, wherein:

the map data are map display data; and

the processing unit displays a map at a display unit by connecting the map

data recorded in the recording medium with the update data obtained by the

update data acquisition unit.

21.   (Currently amended) A map data processing apparatus according

to claim ~~19~~ 1, wherein:

the map data are route search data; and

the processing unit executes route search processing by connecting the

map data recorded in the recording medium with the update data obtained by

the update data acquisition unit.

Claims 22-31   (Canceled)